being planned by the Indian Space Research Organisation (ISRO). In response to a call from ISRO for proposals for smalf experimental packages to be carried on the Mission, a proposal, namely, "X-ray fluorescence Spectrometer (D-CIXS)" to identify various chemical elements of Lunar Surface, which has been designed by Rutherford Appleton Laboratory of United Kingdom, has been received. This payload complements the primary payloads from Indian side. The data from this payload will be made use of by both Indian and UK scientists.

Space Exploration Programme

1584. SHRIVI JAY J. DARDA: Will the PRIME MINISTER be pleased to state:

(a) with the American test pilot steering the first privately developed craft into space establishing Governments having the sole legitimate carriers into space, by when the fast space exploration programmes being developed by India would come near that level;

(b) with our existing pace of technological/research advancement and financial resources, what would be achievement in space studies/ experiments by 2015; and

(c) what are the budgetary requirements to give fillip to quick development of our space programmes?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN); (a) The mission conducted in the USA is a manned mission, which has been undertaken by a private entrepreneur This is only a technology demonstration to reach very high altitudes. The current Tenth five year plan (2002-2007) of Indian Space Programme does not envisage any manned mission. However, preliminary studies on the technological requirements for a possible manned mission have been initiated.

(b) Indian Space programme is guided by a ten year profile and the planned programmes and missions are approved by the Government. In another 10 years, India would have the heavy lift capability and would have demonstrated newer and advanced technologies including technologies related to recovery of space capsules.

(c) The present annual budget for Space programme is approximately Rs. 2700 crorss and the 10th plan total outlay is about Rs. 15000 crores, which caters to ail our planned programmes. The plan outlay for the next plan will be finalised by the end of this plan period.

Advance Technology in Space Activities

1585. DR. K. MALAISAMY: Will the PRIME MINISTER be pleased to state:

(a) the stsitus in the application of advanced technology in space activities;

(b) whether the objective of using the Space Technology as an instrument for socio-economic development of people has been achieved marginally or substaintiaiiy;

(c) the status in indigenisation of space materials in terms of metallic, non-metallic, electronic and chemicals in technology development of space;

(d) whetheir the process of finding out the natural resources like water, minerals, fonjst, etc., of every State is over; and

(e) if so, the States with details have availed such information for exploration and further development?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PF^ITHVIRAJ CHAVAN): (a) Indian Space programme has drawn up a long-term plan identifying the programme directions, Missions and the technology development requirements in the area of launch vehicles, satellite communications, remote sensing and space science research. Accordingly, i-idvanced space technology development activities have been initiated in niany directions like Reusable Launch Vehicles, advanced sensors and materials, imaging sensors, satellite communication techniques £ind scientific instruments.

(b) Yes, Sir. The objective of using space technology for socio-economic development of people has been substantially met in the areas of health, Education, Rural Development, Satellite Communications, Disaster Management Support and Natural Resource Management Applications.

(c) In the last 10 years, more than 100 types of Space grade materials (metallic, non-metallic, chemicals and polymer materials) have been